

# **EXHIBIT C**

**Claims**

I claim:

1. A situation information system comprising:
  - a. a mobile computer with radio,
  - b. a situation information service provider, and
  - c. radio locating instrument signal means to enable said situation information provider to locate said computer with radio and provide situation information and other information and services to said computer whereby said computer and its user may be located and information pertaining to said computer's location may be provided to said computer for execution, including display, on said computer for the edification of the user of said computer.
2. The system of claim 1 wherein said situation information includes mappable hypertext items, including pop-up messages, related to locations substantially proximate to said computer whereby user of said computer is provided with timely information about nearby objects and events.
3. The system of claim 2 wherein said services include communications services whereby the user can communicate with other systems and be apprised of local services information in a timely manner.
4. The system of claim 3 wherein said other information includes information resulting from a search of information available through said service provider whereby the user of said computer is able to locate suitable topical events, people, and services in order to function more efficiently and economically thereby.

5. The system of claim 4 wherein said radio locating instrument signal means includes signal transmissions originating from a component of a satellite positioning system, including GPS or GLONASS, which coordinates said computer with radio and said situation information provider whereby said signal transmissions provide a gating pulse for said computer with radio to send identification information and for said provider to chronometrically await receipt of said identification information by said apparatus and locate said computer with radio thereby.

6. The system of claim 5 wherein said component includes a constellation of satellites of said satellite positioning system whereby said computer location can be determined and included on a representative map displayed on said computer's display.

7. The system of claim 6 wherein said situation information includes traffic information whereby locations and velocity information of area computers can be inferred and displayed on said computer and other said computers.

8. The system of claim 7 wherein said computer includes bracket interfacing means to disconnectably connect to one or more external systems whereby said computer can communicate with other communications computers and said external systems including antennas, peripheral devices, and networks.

9. The system of claim 8 wherein the data for said traffic information is provided severally by said computer with radio and a plurality of similar computers with radios to said information service provider whereby information about traffic flow and congestion is reported automatically by said computers collectively functioning as a plurality of monitors of said traffic flow distributed in proportion to said traffic flow.

10. The system of claim 3 wherein said computer with radio includes a substantially removable telephone handset whereby said handset can be removed from said computer with radio for telephoning safely, due to separation from the EMWR radiative portion of said computer, and collaboratively, due to the simultaneous viewability of the contents of the display of said computer with radio.

11. The system of claim 10 wherein said handset includes photon processing peripheral devices whereby a user may collect situation information including bar-code label information associated with objects and digital photographic information of subjects such as scenes and printed literature and transmit said information to other computers.

12. The system of claim 11 wherein said handset is communicatively linked to said computer by photonic media whereby said handset is free from cord entanglement with said computer with radio during use.

13. A method of communicating situation information between a service provider and a mobile computer with radio in which said provider receives data from said computer with radio and with which said provider determines the location of said computer with radio, processes said data, and provides situation information, including location information, to said computer with radio whereby the user of said computer with radio receives information and services pertinent to said user's location.

14. The method of claim 13 wherein said computer with radio transmits said data and said provider chronometrically awaits said data upon receipt of a gating pulse from a transmitter whereby location of said computer with radio can be ascertained.

15. The method of claim 14 wherein said data includes user data selected from the group consisting of options and filters whereby said computer with radio receives data suitable to the requirements of the user.

16. A method of displaying one or more transmittable mappable hypertext items representing objects, including buildings, roads, vehicles, and signs, on the display of a computer in a manner scalably representing the interrelationships of said objects by

- a. searching each of one or more unique mappable information code sequences, each of which uniquely representing one of said items and taken from the memory of said computer, for a field containing geographical coordinates,
- b. converting said coordinates to an appropriate rectangular grid sized for appropriate proportionate display, and
- c. selectively scalably appropriately displaying said items on said computer display whereby a user may quickly receive and display timely situation information mapped in the context of geographical information appropriate to an area.

17. The method in claim 16 wherein each of said mappable information code sequences is an information sequence including:

- a. an item reference field,
- b. a name field,
- c. a location field including said geographical coordinates, and
- d. a data type field whereby said mappable graphical items may be quickly received, mapped, and optionally executably selected by the user to provide additional situation information or received, stored, and transmitted by the situation information service provider.

<b>Office Action Summary</b>	Application No. <b>08/873,965</b>	Applicant(s) <b>Hollenberg</b>
	Examiner <b>Sam Bhattacharya</b>	Group Art Unit <b>2745</b>

Responsive to communication(s) filed on \_\_\_\_\_

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-21 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1-16, 20, and 21 is/are rejected.

Claim(s) 17-19 is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-3, 13 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Barzegar et al. (US 5,559,520).

Regarding **claims 1, 13 and 20**, Barzegar et al. disclose a wireless information system (Fig. 1) which comprises a mobile computer, shown as CDPD keyboard 117, with radio, a radio locating instrument signal means which enables a GPS satellite network, which reads on the claimed "situation information service provider," to locate the computer with radio and provide information and services to the computer (col. 1, lines 50-59).

Regarding **claim 2**, Barzegar et al. already disclose communication of hypertext information from the GPS satellite

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network to the computer and pop-up messages on CDPD display unit 115 (col. 3, lines 28-40 and col. 4, lines 3-9).

Regarding **claim 3**, Barzegar et al. already disclose services whereby a user can communicate with other systems (col. 1, lines 16-29).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4-7, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barzegar et al. (US 5,559,520).

Regarding **claims 4, 16 and 21**, Barzegar et al. as applied to claim 3 above fail to specifically disclose the limitation of including information resulting from a search through a service provider whereby the user of a computer locates people, events and services.

However, Official notice is taken that it is very well known in the art to include a search engine which produces information

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locating people, events and services and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Barzegar et al. by including such information so that the user is provided the convenience of access to this information, thereby improving the efficiency of the system.

Regarding **claims 5 and 6**, Barzegar et al. already disclose a GPS satellite network in Fig. 1 which includes a constellation of satellites and a display unit 115 which displays geographical positioning of the system.

Regarding **claim 7**, Barzegar et al. already disclose a system which tracks traffic information, including speed of vehicles (col. 2, lines 6-34).

5. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barzegar et al. (US 5,559,520) in view of Mizoguchi et al. (US 5,566,226).

Regarding **claims 8 and 10**, Barzegar et al. as applied to claim 7 fail to disclose the limitation of a computer which includes bracket interfacing means to removably connect to an external system.

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However, Mizoguchi et al. disclose an apparatus (Fig. 3) wherein a computer 50 is removably connected to portable telephone 20. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Barzegar et al. by including the feature of Mizoguchi et al. for the purpose of allowing a user the convenience of operating the computer and telephone separately from one another when needed.

Regarding **claim 9**, it is within the scope of Barzegar et al. to apply the system to a plurality of vehicles with similar computers and radios.

Regarding **claims 11 and 12**, Official notice is taken that it is very well known in the art to attach a device which collects bar code label information to a computer and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Barzegar et al. in view of Mizoguchi et al. by including a bar code label reader for the purpose of scanning information from literature and photographs, and storing and transmitting this information to other computers.

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6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barzegar et al. (US 5,559,520) in view of Penny, Jr. et al. (US 5,414,432).

Regarding **claims 14 and 15**, Barzegar et al. as applied to claim 13 above fail to disclose the limitation of an information provider which awaits data upon receipt of a data from a mobile transmitter.

However, Penny, Jr. et al. disclose a position locating system (Fig. 1) wherein radio 22 transmits location position information via satellites 30, 32 to stations 40, 42. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Barzegar et al. by transmitting data from a transmitter to a satellite as taught by Penny, Jr. et al. for the purpose of verifying the location data at the satellite.

#### ***Allowable Subject Matter***

7. **Claims 17-19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose information code sequences which includes an item reference field, a name field, a location field and a data type field whereby mappable graphical items are received, mapped and executable selected by a user to provide additional situation information or received stored and transmitted by the situation information service provider in a method of displaying transmittable hypertext items as required by claim 17. Furthermore, claims 18 and 19 depend from claim 17.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Buss et al. (US 5,539,395) disclose a communication system wherein a messaging field includes address, information and location fields (see Fig. 2).

Krishan et al. (US 5,822,692) disclose a system wherein a notebook computer 12 has a removably attached communication device 10 (see Fig. 1A).

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**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 305-9051, (for formal communications  
intended for entry)

**Or:**

(703) 305-9508, (for informal or draft  
communications, please label "PROPOSED" or  
"DRAFT")

Hand-delivered responses should be brought to Crystal  
Park II, 2121 Crystal Drive, Arlington, VA., Sixth  
Floor (Receptionist).

10. Any inquiry concerning this communication or earlier  
communications from the examiner should be directed to Sam  
Bhattacharya whose telephone number is (703) 305-4040. The  
examiner can normally be reached on Monday through Thursday  
from 8:30 a.m. to 6:00 p.m. The examiner can also be reached on  
alternate Fridays.

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11. Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 305-3900.

SB:sb

January 13, 1999

*Reinhart Eisenzopf* 1-17-99  
REINHARD J. EISENZOPF  
SUPERVISORY PATENT EXAMINER  
GROUP 2700

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lab  
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In the United States Patent and Trademark Office

Serial number: 08/873,965

Appn. Filed: 06/12/97

RECEIVED

APR 23 1999

Applicant: Dennis D. Hollenberg

Group 2700

Appn. Title: Situation Information System

Examiner/GAU: Bhattacharya, S./2745

Mailed: 1999 April 19  
At: Ventura, California

Amendment A

1999  
APR 21  
Assistant Commissioner for Patents  
Washington, District of Columbia

Sir:

In response to the Office Letter mailed 1999 January 21, please amend the above application as follows:

**Claims:** Cancel all claims of record (1 through 21) and substitute new claims 22 through 39 as follows:

**Claims**

22. An easily scalable, distributed, openly accessible, central-dispatcher obviating situation information system comprising:

a. a plurality of mobile computers with radios substantially operational within a geographical area transmitting user information, including location data, and receiving situation information of selectable execution, including audible, visual, and tactile execution,

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Hollenberg: Amend. A.

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b. radio locating means by which, from said location data including triangulation systems installed within and among buildings for certain of said computers utilized by pedestrians and for other uses, the location of each of said mobile computers is determined and processed into location information including information pertaining to, and derivable from, the change in location of each of said mobile computers, and

c. at least one radio source of said situation information, including said location information, proximate information and other information, for purposes including presenting entertainment, commercial offers, and advertising whereby users of said mobile computers with radios benefit from timely information pertaining to situations within their locus, attract others of said users and said sources to said system, and enlarge the size, robustness, utility, and functional complexity of said system.

23. The system of claim 22 wherein said location information, substantially provided by said location data from said plurality of mobile computers with radios, is further ~~processed to~~ provide traffic information the real-time frequency or duration of visit of said mobile computers at a potentially unlimited number of arbitrarily selected locations of interest can be monitored for maintenance, commercial, or other purposes whereby operating personnel are not required to physically visit and prepare instrumentation specific to each of said locations for which monitoring of traffic, including behavior exhibited by organisms and vehicles, is desired.

\* Syst. which sends information  
to users by visitors at users info ~~select~~  
choose information from which you can select

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Hollenberg: Amend. A.

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24. The system of claim 22 wherein said situation information, substantially organized according to defined areas of said geographical area and to the power level of radio transmission, and said outgoing information including mappable hypertext items, pop-up messages, and icons, selectively relate to the area of each of said mobile computers whereby said users of computers are selectively interactively and reciprocatively provided with descriptive information about objects, people, and events within said area of any of said mobile computers.

25. The system of claim 24 wherein said user information and said other information includes communication with others of said users of said mobile computers and said sources and information pertaining to a search of information available through said radio source or sources substantially organized according to said areas, including commercial offers and sources of goods and services, and user identification and credit-related information pertinent to commercial agreements whereby individuals among said users of said mobile computers can mappably locate others of said mobile computer with radios and topical events, people, products, and services and arrange for payment and fulfillment of commercial transactions in order to function more efficiently and economically.

26. The system of claim 25 wherein said user information and said situation information includes entertainment information whereby users of said mobile computers assume fictional identities for purposes of entertainment and engaging in recreational games visually, audibly, or tactiley executed selectively within the area of any of said computers.

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Hollenberg: Amend. A. 4

27. The system of claim 26 wherein certain of said mobile computers with radios include bracket interfacing means to alternatively disconnectably connect to external systems including power supplies and circuits in vehicles whereby said computer can communicate with other computers and systems including antennas, peripheral devices, and networks in order that the same said computer functions as a situation information system in both vehicle and on foot.

28. The system of claim 27 wherein said location data for said traffic information is provided substantially by said plurality of mobile computers with radios to said source of said situation information for information about traffic flow and congestion, including vehicular, in said areas whereby traffic descriptions on byways are collected automatically by said computers collectively functioning as a plurality of sensing and reporting units aboard carriers, including vehicles, which are substantially included within said traffic flow and distributed statistically proportionally to traffic flux.

29. The system of claim 28 wherein certain of said mobile computers with radios include a substantially removable telephone handset which connectively communicates with the relatively high-power radio transmitting portion of said mobile computers with radios whereby the user of said handset remains safely distanced from the relatively powerful radio frequency transmitting portion of, and high-power EMWR emanating from, said mobile computer with radios during telephoning and, at the same time, is simultaneously able to view and interact with the executing contents of said mobile computer in order to alternatively communicate using said contents or correspondingly collaborate regarding said contents.

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Hollenberg: Amend. A. 5

30. The system of claim 29 wherein said areas may include bar codes affixed to physically accessible features including buildings and street signs, including those of said areas in which map information from said source of said situation information service is not pertinent or is unavailable, for said mobile computers to decipher and correlate with information executing on said computer using peripheral devices whereby a user unfamiliar with certain of said areas or disoriented may collect situation information including bar-code label information associating the immediately local subset of physical features, and user's current location thereby, with said features' locations as mapped on a stored digital map displayed on said mobile computer including digital photographic information of subjects such as views and other subject matter and subsequently transmit said information to other computers.

31. The system of claim 30 wherein said handset is communicatively linked to said computer by a photonic medium whereby, through use of an infrared or low-power radio link, said handset is free from awkward cord arrangement or entanglement with said mobile computer with radio during use.

32. A method for conducting commerce wherein information communicated wirelessly between a situation information system associated with providers, including merchants and individuals, presents offers, including those pertaining to goods and services, and potential customers severally using mobile computers with radios, comprising the steps of:

a. acting substantially simultaneously with receipt of a gating pulse from a transmitter, transmitting customer information, including identification and location information, severally by said mobile computer with radios, and receiving said identification and location information chronometrically or by mappable coordinates in said situation information system,

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Hollenberg: Amend. A. 6

b. ascertaining subsequently whether time-related location information of certain of said mobile computers with radios shows said computers to be suitably proximate to said offers, or display thereof, presented by said providers, and

c. transmitting one or more said offers with said situation information system, including by visual, aural, and other data types according to said providers selection and other pertinent information, severally to said certain of said mobile computer with radios according to said customers' selections and contingently dependent on subsequent actions of said customers whereby said customers using said computers with radios can shop more knowledgeably and efficiently.

33. The method of claim 32 wherein said actions of said customers include severally making responses to appropriate offers and severally communicating using said mobile computer with radios each of said responses, including bids, counter offers, and purchasing and credit information, to said situation information system associated with providers whereby mutually beneficial commerce is securely and easily conducted.

34. The method of claim 33 wherein said customer information includes data selected from the group consisting of options and filters whereby said customers severally receive information, including goods and services information, appropriate to their requirements.

35. A method of communicatively executing, including making apparent to the aural and tactile senses of the user, one or more transmittable mappable hypertext items representing people, organisms, and objects, including buildings, roads, vehicles, and signs, on a computer in a manner scalably representing interrelationships of said objects, comprising the steps of:

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Hollenberg: Amend. A.

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- a. searching each of one or more unique mappable information code sequences, each of which said code sequences serving to uniquely represent one of said items and either copied from the memory of said computer or downloaded from an alternate source, for a field containing geographical coordinates, said each of said code sequences includes an item reference field, a name field, a location field including said geographical coordinates, and a data field,
- b. converting said coordinates to an appropriately proportionate representation on said computer, and
- c. displaying selectively scalably said items on said computer whereby said user may quickly receive and display timely situation information mapped in the context of spatial information, including appropriate to a geographical or other area, in which said mappable hypertext items are quickly received, mapped, and optionally executably selected by said user to provide additional of said situation information or received, stored, and transmitted by a provider of said situation information.

36. The method in claim 35 wherein said interrelationships of said objects are distance quantities separating each of said objects and are represented by mappable hypertext items processed and selectively represented on said computer whereby time and distance to or between objects may be determined and delimited in order to cause additional information to be executed on said computer from sources, including memory and said service provider, and increase efficiency of said user thereby.

37. The method in claim 36 wherein said mappable hypertext items include a user modifiable location symbol, including providing dynamic characteristics,

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Hollenberg: Amend. A. 8

whereby said user may choose representation by a unique icon on said computer which can be made to execute on others of said computers.

38. A method of receiving transmitted digital information from one or more selectable lists of selectively operatively serially arranged sources of information into computer memory, comprising the steps of:

- a. executing information from a first source of said digital information on said computer, including being viewed on a display,
- b. receiving substantially concurrently information from subsequent of said sources of said digital information from said serially arranged sources on said lists, and
- c. storing retrievably said information from said sources in said computer memory for execution selectively alternatively, including preemptively or subsequently, to said information from any of said sources whereby time-critical, location-dependent information transmitted slowly from multiple sources of said digital information is received in a timely way while information currently executing on said computer is being otherwise utilized.

39. The method of claim 38 including a keyword search wherein sources of said digital information in which keyword terms are found are selectively added to said list of sources for receiving whereby a user may selectively initiate and alter searches for specific keywords on topics potentially useful to said user, including roadside service locations and other searches, while utilizing said digital information executing on said computer.

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Hollenberg: Amend. A. 9

## Remarks – General

Applicant wishes to thank the Examiner for providing additional references in the Office Action (OA) which serve to further define the matter of subject application, henceforth referred herein as subject application. In particular, reference *Portable Telephone Apparatus Which Can Be Connected To An External Apparatus Without Using An Adapter*, U.S. Patent No. 5,566,226 to Mizoguchi et al., enables closer definition of subject application; however, Mizoguchi et al. fails to disclose against subject application as noted in the discussion below for old claims 10 through 12.

**Prior art (Barzegar et al., U.S. Patent 5,559,520) is a poor reference**

Barzegar et al. (U.S. Patent 5,559,520) is made difficult to understand because its meaning is obscured by unclear terminology. Fig. 1 and “SUMMARY OF THE INVENTION” col. 2, line 40, refer to a “*user locator control* ...” and, similarly, col. 3, lines 37 and 40, and col. 4, line 8, mentions “*the user*” and “*The authenticated user*”, respectively, as a **first**, primary functional role (6 times). A **second** functional role important to the operation of this prior-art system, “*dispatcher*”, appears in col. 1, lines 43 and 59, col. 2, lines 28, 32 and 33, col. 3, line 15 and 17, and col. 4, line 21 (8 times). However, a **third** functional role important to the operation of this system is “*vehicle operator*” is revealed in col. 1, line 43 and col. 3, line 53 (2 times); a **fourth** functional role is “*operator*”(of what?) in col. 3, lines 17 and 18, and col. 4, line 18 (2 times). Barzegar et al. fails to define, or otherwise make clear, the functional relationships between four disclosed roles: the “*user*”, the “*dispatcher*”, the “*vehicle operator*”, and “*the*” or “*its*” “*operator*”.

Additionally, Barzegar et al. is further obscured by a wide variation between terms referring to the system disclosed. For example, while the patent title is shown as “*Wireless Information System*”, the “SUMMARY OF THE INVENTION” describes “*An information-providing system....*” (col. 1, line 50). Next, however, “*Fig. 1 is a schematic*

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Hollenberg: Amend. A. 10

*of a user location and information provider....*" (col. 2, lines 38 and 39), also repeated for state diagram in Fig. 3. Finally, Barzegar et al. then discloses a fourth title: "*In the illustrative location information communication system of Fig. 1....*" (col. 2, lines 46 and 47). Because Barzegar et al. is vague and does not clearly disclose its patent matter, it is an unreliable, poor reference.

Finally, Barzegar et al. claims "*An interactive wireless information system for locating and providing location related information to and from a mobile vehicle; ....*" in claim 1 (col. 4, line 50) and "*Apparatus for providing interactive wireless communication between an information system providing location related information and a mobile vehicle;....*" in claim 2 (col. 5, lines 10 through 12). Yet, Barzegar et al. exclusively discloses in its **solitary reference** to 'interactivity' a severely limited form occurring between a "**dispatcher**" and the "**vehicle control module**" and/or its "**operator**": "*The system permits interactive communication between a dispatcher and the vehicle control module and/or its operator.*" (col. 3, lines 16 through 18). This degree of interactivity has long been routinely available through plain old (point-to-point, switched) telephone (communications) services (POTS). As such, Barzegar et al. cannot be interpreted as disclosing (or claiming) interactive communications between any two "**users**" (as disclosed by subject application) because Barzegar et al. requires that all so-called "interactive communications" occur **exclusively** through said "**dispatcher**." Further, such **trivial** "interactivity", outside of its application to the narrow art of secure vehicle dispatching, has long been available wirelessly through dispatched radio communications and, more recently and long before said prior art filing date of Sept. 26, 1994, using cellular telephone systems. Because Barzegar et al. **fails to disclose** novel and unobvious interactivity and, despite that failing, explicitly **claims** interactivity, it is a poor reference.

#### Prior art (Barzegar et al.) teaches away from subject application

Barzegar et al. discloses a dedicated, dispatcher-controlled, deviation-intolerant, delivery-vehicle routing system that requires **central control** of mobile computers' loca-

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Hollenberg: Amend. A. 11

tions, **opposite** in the architecture and effect of the freely open, randomly accessible system for **autonomous** mobile computers of subject application. The dispatcher-governed, routing-control system disclosed by Barzegar et al. emphasizes that the system is directed against the choice of those most closely associated with the system element the location of which is monitored. The free choice of the "*vehicle operator*" is actively **prevented** by including "*Alarms, indicating deviation from some desired reference, are transmitted over the packet network to the dispatcher*" (column 2, lines 31 through 33), an "*alarm module*" (shown as item 211 in Fig. 2, column 3, lines 50 and 64; column 4, line 23), "*alarm*" or "*alarms*" is cited frequently throughout (column 4, lines 35, 36, 46, and 47), "*a locator which ... reports deviation*" (column 1, lines 56 through 58), "*deviations...*" (column 3, line 13) and "*routing control*" (shown as item 209 in Fig. 2 and in column 1, line 62 through 64).

Significantly, Barzegar et al. addresses an information system that is only superficially similar to subject application, citing "*vehicle*" (a total of 44 times) and "*routes*" and excluding any hint of pedestrian use as well as freely entering and exiting, openly accessible self-organization by pedestrian users, such as the behavior that shoppers would necessarily exhibit. Further, owing to its oft-repeated requirement for a "*dispatcher*" (col. 2, lines 28 and 29; lines 31 through 33; and col. 3, lines 13 through 18), Barzegar et al. cannot be easily scaled to large, regional systems.

### Synergism of subject application

Unquestionably, Barzegar et al. is intrinsically limited to routing delivery vehicles and requires a vehicle dispatcher with all the attendant limitations, and so on, to control the routing of deliveries and make the system function. Oppositely, subject application, far from requiring any such controlling dispatcher, is robustly **self-organizing** and **scalable** to a comparatively unlimited extent. Additionally, subject application inherently accommodates vast, **changing populations** of users and is **spatially unlimited**, both of which characteristics are not immediately obvious from a mere inventory of the invention's parts. These attributes are novel and unobvious.

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**Prior art (Barzegar et al.) explicitly teaches away from complex systems as pertaining to subject application**

Moreover, as further addressed below, centralized control of vehicle routes as disclosed by Barzegar et al. is backwards from the art of subject application, which addresses said prior art and similar examples: *"However, with thousands of mobile transmitters, such as motor vehicles on crowded freeways, or widely ranging systems traveling to diverse destinations, the forementioned prior art would require unworkably large, difficult to update, on-board locator modules or data bases. Such systems would suffer from the centralized nature of their information sources and would therefore be subject to complex data processing and data updating burdens which no ordinary user could perform as the logistics would be unworkable."* (subject appn., p. 5 ff). Scaling up said prior art is certainly **unworkable** at the system level.

Inherently scalable to a virtually unlimited degree, subject application **expands marketplaces** by more efficiently bringing potentially **tens of thousands of buyers and sellers** together to conduct commerce using principles pertinent to the **dynamics of complex systems**: *"As discussed regarding natural information processing systems, complex system behavior in the real world requires both large numbers of processing elements or nodes and high-speed communications or bandwidth* (Hollenberg, D. "Information Processing Systems", in *Encyclopedia of Computer Science and Technology*, vol. 26, supplement 6 (A. Kent and J. G. Williams, eds.) Marcel Dekker, Inc., New York, pp. 153-162, 1990)" referred to in prior art reference, *Secure Personal Application Network*, U.S. Patent 5,694,335 issued Dec. 2, 1997, to Hollenberg (col. 4, approx. lines 42 through 49) (this patent reference issued from, and supersedes, referenced appn. number 08/613,725 Hollenberg *Secure Personal Application Network* March 12, 1996, shown as item AS on Form PTO 1449, sheet 1, of subject application) (col. 4, lines 46 through 49) and listed on Form PTO 1449 (Supplemental) included, with a copy of each prior art reference, including said "Information Processing Systems" article as item AR, under cover of this Amendment A.

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Additionally, because subject application art incorporates the self-organizing dynamics of complex systems, particularly pertinent in traffic and commerce applications, a supplemental prior art reference is submitted. This recently published collection of research papers indicates the increasing awareness among researchers of diverse scientific disciplines of the importance of this new field of complex systems and their dynamics: *“...shortfalls in reductionism are increasingly apparent. Mostly these arise from information overload .... Another problem is oversimplification. ... we have taken a ‘complex system’ to be one whose properties are not fully explained by an understanding of its component parts.”* Gallagher, R. et al. “**Beyond Reductionism**” *Science* v. 284(5411) pp. 79-109 (p. 79) April 2, 1999 (please refer also to the two articles on pages 87-89 and 99-101). Thus, art that teaches elements of the **new field of complex systems** and their **dynamics**, including subject application, is **novel** and **unobvious**.

In light of complex-systems dynamics, Barzegar et al. discloses merely conventional control-system-based invention and **discloses no suggestion** of considering the **problems** and dynamical effects of **large numbers of participants**. Therefore, Barzegar et al. fails to provide germane basis for determining subject application’s novelty or obviousness. In contrast, subject application uses the **new principle** of complex systems’ **self organization** to provide surprising dynamical characteristics as *“An easily scalable, distributed, openly accessible, central-dispatcher obviating situation information system comprising: a plurality of ....”* (preamble to claim 22) freely roaming, independently motivated, users of mobile computer with radios who will use them to solve a vast range of **entirely new and different kinds of problems** than the delivery vehicle routing problem addressed by Barzegar et al. as further argued below.

#### **Remarks Addressing the First Office Action**

Office Action, beginning with item 1, is a recitation of 35 U.S.C. Sect. 102.

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2. Claims 1-3, 13 and 20 are rejected under 102(e) as being anticipated by U.S. Patent 5,559,520 to Barzegar et al.

Applicant has substituted new independent claim 22 for old claim 1 which narrows the scope of subject application to "*An easily scalable, distributed, openly accessible, central-dispatcher obviating situation information system...*", "*a plurality of mobile computers with radios....*", and includes use "*within and among buildings*"; claim 24 is substituted for old claim 2 and more narrowly describes situation information that "*... organized according to defined areas ... the power level of radio transmission ... selectively relate to the area of each of said mobile computers*". Claim 22 cites novel, unobvious art in view of cited

Claim 25 is substituted for old claim 3 (and combined with 4) and more narrowly claims "*...commercial offers and sources of goods and services, and credit-related information....*"; independent claim 32 is substituted for old independent claim 13 and is written more narrowly as "*A method for conducting commerce...*"; and independent claim 38, written more narrowly as "*A method of receiving transmitted digital information from one or more selectable lists of selectively operatively sequential sources of information into computer memory....*", is substituted for old claim 20.

**Prior art (Barzegar et al.) solves a different problem (re: old independent claim 1 and depending claims)**

Prior art relied upon, Barzegar et al., noted above as a poor reference, discloses a limited, centralized control system for routing dray vehicles. In said prior art's "BACKGROUND OF THE INVENTION" section we are informed what the invention's background is, "Each of these systems allow communication with mobile vehicles, especially coordinated fleets...." (col. 1, lines 39 and 40). Further, said prior art's "SUMMARY OF THE INVENTION" section teaches that "*A mobile vehicle includes a locator which... reports deviation for preset operational and route thresholds and communicates such information to a dispatcher*" (col. 1, lines 55 through 59) and, at the

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end of the section, "*These routes may be downloaded to and removed from the mobile vehicle as-needed by a dispatcher. An alarm module may be utilized to note a deviation from a desired route, speed, duration, a vehicle status, or arrival at a particular location. Alarms, indicating deviation from some desired reference, are transmitted ... to the dispatcher. Location sensitive messages may be sent by the dispatcher ....*" (col. 2, lines 27 through 34). That the dispatcher function is critically important to the cited system is indicated by "*Deviations from predetermined constraints are communicated to a dispatcher as alarms or dam (sic). The system permits interactive communication between a dispatcher and the vehicle control module and/or its operator.*" (col. 3, lines 14 through 18). While Barzegar et al. may appear to have disclosed requisitely similar components of subject application, that prior art's key functional component is the **dispatcher** -- functioning through the "**locator control module**" (shown in Fig. 1, num. 107 and the schematic of Fig. 2) and as "**a controller module**" in claim 1 (col. 4, line 59) and in claim 2 (col. 6, line 1) -- without which the vehicle control system of Barzegar et al. will not function as intended.

Such control module (or controller) function is **irrelevant** to subject application. Additionally, subject application utilizes any form of locating method or apparatus, such as GPS outdoors or triangulation near or within buildings, for example. Therefore, Barzegar et al. and subject application address different arts.

**Subject application describes a contrarian invention (re: old independent claim 1 and depending claims)**

Barzegar et al. disclose the prevailing methodology for designing computer-based systems. Conventional wisdom **dictates** that control of individual units is best done using a **centralized computer**, as reflected in legacy computer systems. Such systems are, however, vulnerably **brittle** to frequent **failure** (hence the ARPANET architecture, now called the Internet). In contrast, **distributed systems**, the architecture of subject application and its situation information system, obviates central control and provides **robustness** as quoted above in the Hollenberg prior art.

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**Subject application describes an invention achieving unexpected results (re: old independent claim 1 and depending claims)**

For example, instead of the burden imposed by the centralized monitoring of installed traffic sensors, as is typical of the current practice, subject application provides sensor-equipped vehicles which **cost governments nothing**. The reason individuals will buy their privately maintained but publically pooled mobile computer with radios is that users receive **higher utility** from such systems. The high utility such mobile computers will provide users, such as using them to locate **cost-saving merchandise offers**, will more than **compensate** for their cost: their net cost may actually dwindle to nothing over time. Because such mobile computers' cost is effectively nil, their increased use will provide increasingly finer traffic information as time passes. Thus, in achieving such unexpected results, subject application is a **novel, contrarian** invention.

**Prior art (Barzegar et al.) unworkable if implemented according to subject application's functional result (re: old independent claim 1 and depending claims)**

Barzegar et al. disclose that their system's security is maintained by the central control functions: "*The packet data interface is instructed to listen to the CDPD network and appropriate the necessary authentication data. With authenticated data received the geographical module is loaded. When finally loaded the data store 203 is prevented from further updating until a subsequent authentication is received enabling the loading of the routing module 209. The same process is repeated for the alarm module 211 thereby assuring separate security for each different layer of modules.*" (col. 3, lines 44 through 53). Similarly, "*The data store 203 is inhibited from further updates until further authentication is received....*" (col. 4, lines 15 through 17). More importantly, routing **control** is explicitly withheld from the vehicle operator: "*The vehicle operator may... override if permitted....*" (col 1, lines 54 through 56). Compromising such security measures would prevent Barzegar et al. from functioning usefully in its intended role.

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**Subject application solves an unrecognized problem (re: old independent claim 1 and depending claims)**

In sharp contrast, subject application discloses a plurality of mobile computer with radios and **at least one situation information source** able to locate them. These components function as elements of a **dynamical system** exhibiting an infinitude of **complexity** in range and number of digital and physical, social and **commercial, interactions**. Attempting to force subject application into the disclosed form of Barzegar et al. would necessarily eliminate the user-controlled, open-entry nature of subject application and limit its size and efficiency. Alternatively, **omission of the central control element** from Barzegar et al. provides the only possible alternative embodiment in which said prior art might function similarly to subject application.

**Omission of an element of prior art (Barzegar et al.), the central control element, is necessary – *but not sufficient* – to provide function similar to subject application (re: old independent claim 1 and depending claims)**

In "DETAILED DESCRIPTION" section, Barzegar et al. assert the importance of the "*location controller*" which "... *evaluates the data and transmits data through a wireless communicator to a desired recipient.*" (col. 2, approx. lines 50 through 52). This requirement to communicate with a pre-selected "*desired recipient*" is **central control**. Barzegar et al. discloses an inextricable dependence upon central control: "... *routes may be downloaded to and removed from the mobile vehicle as-needed by a dispatcher. An alarm module may be utilized to note a deviation from a desired route, speed, duration, a vehicle status or arrival at a particular location. Alarms, indicating deviation from some desired reference, are transmitted over the packet network to the dispatcher.*" (col. 2, lines 27 through 33). With such central control function removed, Barzegar et al. might function similarly to subject application, but only by adding an additional element, ubiquitous information sources, disclosed in subject application; this emphasizes the difficulty with which said prior art, through **unsuggested modification**, might be made to address the problems addressed by subject application.

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**Adding necessary component to prior art (Barzegar et al.) defeats original function of prior art (re: old independent claim 1 and depending claims)**

For example, adding the potentially vast resources of the "situation information" component from subject application (new claim 22, part c) would provide the equivalent wideband, commercial-transaction element missing from Barzegar et al. with the functionality relied upon by this OA rejection. Yet, adding such free-ranging functionality would defeat said prior art's necessary security in providing dispatched delivery vehicle routing, as the SUMMARY of said prior art discloses. This test, therefore, demonstrates that **reintroducing such secure central control components**, including the requisite personnel who must decide exactly which customers are to be provided with service and when, **teaches away** from the open accessibility and distributed choice available to all mobile computer users disclosed in subject application.

**Prior art (Barzegar et al.) reference is inoperative in view of subject application and new claims (re: old independent claim 1 and depending claims)**

Taken from a different perspective, Barzegar et al. claims "*An interactive wireless information system for locating and providing location related information to and from a mobile vehicle; ....*" in claim 1 (col. 4, line 50) and "*Apparatus for providing interactive wireless communication between an information system providing location related information and a mobile vehicle; ....*" in claim 2 (col. 5, lines 10 through 12). Yet, Barzegar et al. exclusively discloses in its **solitary reference** to 'interactivity' a severely limited form occurring only between a "**dispatcher**" and the "**vehicle control module**" and/or its "**operator**": "*The system permits interactive communication between a dispatcher and the vehicle control module and/or its operator.*" (col. 3, lines 16 through 18); Barzegar et al. discloses no additional uses of the term, interactivity. This degree of interactivity has long been routinely available through plain old (point-to-point, switched) telephone (communications) services (POTS). As such, Barzegar et al. cannot be interpreted as disclosing (or claiming) interactive communications between any two "**users**" (as disclosed by subject application) because Barzegar et al. requires that all so-

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called "interactive communications" occur **exclusively** through said "dispatcher." Further, such **trivial** "interactivity" is clearly obvious and not novel because it has long been available wirelessly through dispatched radio communications and, more recently and long before the filing date of Sept. 26, 1994, using cellular telephone systems.

In contrast, subject application provides novel and unobvious utility in providing users of subject situation information system with the ability to contact one or more other users without intervention by a dispatcher such as that in said prior art. Further, subject application provides users the ability to physically locate one or more consenting users without the intervention of a dispatcher such as that disclosed by said prior art. **The functionality of Barzegar et al. is merely a subset of subject application.**

**Subject application discloses new principle of operation (re: old independent claim 1 and depending claims)**

In contrast to prior art (Barzegar et al.) which explicitly discloses and requires organized central-control system principles, subject application substantially demonstrates function pertaining to complex systems and their self-organizing behavior. Thus, for all of the above reasons, the claimed art is novel and unobvious, and emphasizing these distinct characteristics, old claim 1 has been rewritten as new claim 22.

**Old claim (3 and) 4 rejected, rewritten as claim 25**

Combined old claims 3 and 4 more narrowly claim "... *substantially organized according to said areas, including commercial offers... credit-related information....*" in describing information communicated by the system which Barzegar et al. fails to disclose or suggest. Old claims 3 and 4 are combined to teach novel and unobvious art and have been rewritten as claim 25.

**Old claim (13) rejected, rewritten as commerce method**

New claim 32, substituted for old claim 13, is rewritten as a **method of commerce**, "... *information communicated wirelessly between a situation information*

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*system associated with providers ... presents offers, including commerce in goods and services, and potential customers severally using mobile computers with radios..."* which Barzegar et al. fails to disclose or suggest. Therefore, claim 32 is novel and unobvious in view of prior art.

**Old claim (20) rejected by no convincing reasoning**

New claim 38 is substituted for old claim 20 which was rejected as being anticipated by Barzegar et al. Barzegar et al. discloses no method for selectively receiving information from a user-selectable list of sources while current information is being user executed: *"A method of receiving transmitted digital information from one or more selectable lists of selectively operatively serially arranged sources of information into computer memory..."*.

**Old claim 20 (rejected) solves an unrecognized problem and is unobvious in light of its lack of implementation**

Mobile data communications systems are plagued with low throughput due to bandwidth limitations, signal path, etc. Yet, such information can be crucial to the travelers' safety and enjoyment of their trips. Systems utilizing available throughput in the manner suggested do not yet exist, and the system of subject application solves that unrecognized problem. Because the problem is unrecognized, no solution could be invented until subject application disclosed the solution.

An "obvious" (sect. 103) solution can reasonably be expected to have appeared by now as a result of the frenetic, ten-million-dollar investments in the competition-driven development of personal computer browser software: *"There's no question that the most important piece of software development developed since the beginning of the computer is the browser."* (Sean Maloney, Senior Vice President, Intel, on CNET News.com, April 19, 1999). Yet, the **only current solution** is to launch **multiple redundant browser programs** and individually point each browser to each URL of the set of desired URLs, a work-around requiring excessive time and memory resources.

*AM*  
*April 19, 1999*

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New claim 38 better identifies pertinent elements. Clearly, in view of the prior art claim 20, rewritten as claim 38, is both novel and unobvious.

3. Recitation of 35 USC Sect. 103(a).

4. Claims 4 - 7, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barzegar et al. (US 5,559,520).

Applicant has substituted claim 25 for old claim 4 (combined with 3) and, as mentioned above, more explicitly cites "...commercial offers... credit-related information...."; **deleted** old claims 5 and 6; substituted claim 23 for old claim 7; and substituted independent claim 35 for combined old independent claim 16 and old dependent claim 17; and substituted dependent claim 39 for old dependent claim 21.

#### **Old claim 21 (rejected) solves unrecognized problem**

Claim 21 has been rewritten to more narrowly cite its novelty as depending from claim 39 (old independent claim 20, new independent claim 38, is addressed above as solving an unrecognized problem and no examples of the problem's solution are known) to further describe additional features of that novel visit-list method: "...sources of said digital information in which keyword terms are found are selectively added to said list of sources....". Old dependent claim 21 is rewritten as dependent claim 39 to more narrowly cite its novelty and unobvious art.

#### **Old claim 7 (rejected) is rewritten**

Old claim 7, rewritten and replaced by claim 23 cites "...location information, substantially provided by said location data from said plurality of mobile computers... is further processed to provide traffic information...." which more narrowly claims the **novel source** of traffic data. That is, those mobile computers with radios comprising the traffic being monitored also **consume** the traffic information produced. Old claim 7,

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rewritten as claim 23, therefore, cites novel features. It is also demonstrably unobvious in view of the **Intelligent Vehicle Highway System (IVHS)** initiative which, in its approximately ten years of existence, has not produced any remotely similar art.

5. Claims 8 -12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barzegar et al. (U.S. 5,559,520) in view of Mizoguchi et al. (U.S. 5,566,226).

Applicant has substituted claims 27 through 31 for old claims 8 through 12, respectively.

**Prior art (Mizoguchi et al.) is misunderstood, not an applicable reference for claim 8**

Old claim 8 (rejected) as being obvious to modify Barzegar et al. by including Mizoguchi et al. Applicant submits that Mizoguchi et al. fails to disclose a computer to *"... include a bracket interfacing means to alternatively disconnectably connect to external systems including power supplies ... in vehicles...."*. Such a feature is necessary in order to use the mobile computer in both vehicles and by pedestrians when leaving the vehicle. Old claim 8 is replaced by rewritten claim 27.

**Old claim 8 (rejected) solves unrecognized problem**

In contrast, subject application shows the novel merit of using a **single mobile computer with radio** with *"...bracket interfacing means to alternatively disconnectably connect to external systems ...."* for use while in a **vehicle** or, **alternatively** disconnected, when **walking**. While attached to its bracket in a vehicle, for example, the mobile computer can serve as a control interface for the vehicle's digital systems. During vehicular travel the computer can connect to situation information systems en route to its destination because it is interfaced to the vehicle's **external antennae**, for example (or may even provide aspects of information readout and control of said vehicle). Once arrived at its destination, the computer may be **removed** from its interfacing bracket to be used **afoot**.

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This degree of utility in a multifariously connecting computer system is currently unknown and is, therefore, novel and unobvious. Old claim 8 has been more closely written for its features as claim 27.

**Prior art, Mizoguchi et al. and Barzegar et al., are individually complete and neither suggests the cited combination against old claim 9**

Mizoguchi et al. discloses an apparatus to replace "*...a conventional portable telephone apparatus, a data processing apparatus, and an adapter unit....*" (col. 2, lines 13 through 15) to solve the problem of connecting said telephone and processing apparatus, but little more. Mizoguchi et al. fails to disclose attaching a computer to a vehicle or other systems, including power supplies, and so on. Similarly, Barzegar et al. fails to show a disconnectable "locator", and so on, from its vehicle because the citation exclusively addresses vehicles and, therefore, has no reason to do so.

**Prior art (Barzegar et al.) lacks implementation due to limited scalability (re: old claim 9)**

As noted above, pages 9 through 19, Barzegar et al., because of its **centralized-control architecture**, can neither economically nor efficaciously scale to the numbers of traffic sensors and controllers which that prior art discloses which would be needed to provide useful traffic information, despite clear and **obvious need** in major metropolitan areas throughout the world. This **lack of implementation**, particularly in light of the nearly ten-year duration of the IVHS Initiative, emphasizes the prior art's inappropriateness outside of limited, vehicle-fleet applications.

**Subject application represents a contrarian invention (re: old claim 9)**

As submitted on page 4 above, subject application discloses a system with a distributed architecture in which the benefit that the system provides in, for example, commercial interactions, encourages its wider use as, for example, a traffic reporting system: "*...location data for said traffic information is provided substantially by said*

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*plurality of mobile computers with radios to said source of said situation information....* That **consumers** of traffic information also, using their own mobile computers with radios, substantially **supply** location data for said traffic information is both novel and unobvious. Old claim 9 is rewritten as claim 28 to point out such aspects.

**Prior art (Barzegar et al. in view of Mizoguchi et al.) is misunderstood, not an applicable reference against old claim 10**

Old claim 10 (rejected) as being obvious to modify Barzegar et al. by including Mizoguchi et al. However, Mizoguchi et al. fails to disclose a telephone **transmitter** portion physically **separated** from the **handset** portion as shown in subject application Fig. 10, and claimed, "*... removable handset which connectively communicates with the relatively high-power radio transmitting portion of said mobile computers with radios....*" Handset 9k (subject appn., Fig. 10) is clearly shown (in use) **physically separated** from said telephone transmitter portion located within device 2e. Further, handset 9k communicates with device 2e either photonically (rf) or by a cord (Fig. 4).

Reasons for separating the telephone parts include enabling the **simultaneous** use of both computer and voice communications, **removing** the transmitter's high EMW **radiation** (subject appn., Fig. 10, numeral 15m) away from the user's brain to avoid radiating those tissues (though as yet not proven medically significant; please refer to cited *New Scientist* ref.), decreasing electronic-component redundancy and cost, and providing a built-in platform for adding other necessarily hand manipulated peripheral devices inexpensively to the handheld device, which are novel, unobvious results. Prior art (Mizoguchi et al.) fails to disclose any similar art.

**Prior art (Barzegar et al. in view of Mizoguchi et al.) interpretation is strained, references are individually complete, useless to combine, and not applicable references against old claim 10**

Further, Barzegar et al. discloses and **claims** a wireless data communications device, the cellular digital packet device (CDPD) for communicating data. Therefore,

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the combination of an added portable telephone -- regardless of its method of connection and use -- to provide wireless data capability (as disclosed by Mizoguchi et al.) would be **redundant** and, therefore, not useful. Old claim 10 is substantially rewritten as claim 29 to clarify this usefully novel arrangement of components unobvious until viewed in the specific context of the art disclosed by subject application.

**Prior art (Mizoguchi et al.) misunderstood, a strained interpretation, and not applicable as reference against old claim 11**

Although Mizoguchi et al. discloses a portable telephone, though neither is it permanently housed in, nor its transmitter integral with, a computer, the reference fails to disclose a photon processing peripheral device such as those for collecting situation information in subject application. Additionally, Mizoguchi et al. teaches data as transceived via a **conventional** mobile telephone which is **opposite** to that taught by subject application: transceiving voice through a separate handset **audio** portion to the high-power **transceiver** portion located separately and relatively safely within the mobile computer and its circuitry.

**Prior art (Barzegar et al. in view of Mizoguchi et al.) misunderstood, references are individually complete and do not refer against old claim 11**

Old claims 11 (rejected) as being obvious to modify Barzegar et al. by including Mizoguchi et al. While one may contemplate adding components to a system, like adornments on a human body, rationally choosing among alternatives requires that such additions have some useful bearing to the underlying system. Neither cited reference, separately or in combination, suggests adding photon processing peripheral devices or, more distantly, linking any such additions by means of photonic media. Each of the above references is individually complete in addressing route vehicle dispatching and transceiving data wirelessly by CDPD as Barzegar et al. and Mizoguchi et al. , respectively, address. Neither prior art discloses or suggests **collecting** data separately from that which is specific for use in respective or combined disclosed

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systems. Old claim 11 has been rewritten as claim 30 to read "... *subareas may include bar codes affixed to physically accessible features including buildings and street signs ... of said areas in which... situation information service is ... unavailable ....*". These features taught by subject application are therefore novel and unobvious.

**Prior art (Barzegar et al. in view of Mizoguchi et al.) misunderstood, references are individually complete and do not refer against old claim 12**

Old claim 12 (rejected) as being obvious to modify Barzegar et al. by including Mizoguchi et al. Barzegar et al. in view of Mizoguchi et al. fails to disclose any photonic connection or conductive medium linking a disclosed separate portable telephone or any other peripheral device subordinate to a computer, and certainly not such a device similarly disposed to a computer with radio. Subject application claims novel and unobvious art: "... *handset is communicatively linked to said computer by a photonic medium....*" Prior art also does not disclose, either combined or separately, a combination telephone audio portion handset separate from a wireless transceiver located within a computer which subject application discloses as novel and unobvious. Old claim 12 is rewritten as claim 31.

6. **Claims 14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barzegar et al. (U.S. Patent 5,559,520) in view of Penny, Jr. et al. (U.S. Patent 5,414,432).

**Old claims 14 and 15 (rejected)** have been rewritten as dependent claims 33 and 34 which depend from **method of commerce** independent claim 32. Claim 14 has been rewritten as dependent claim 33 to teach novel and unobvious art: "...*said actions of said customers include severally making responses to appropriate offers and severally communicating using said mobile computer with radios each of said responses, including bids, counter offers, and purchasing and credit information....*" Cited prior art, neither individually nor in combination, discloses wireless methods of conducting commerce or similar. Claim 15 has been rewritten as dependent claim 34 to teach novel

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and unobvious art: "...customer information includes data selected from the group consisting of options and filters ....".

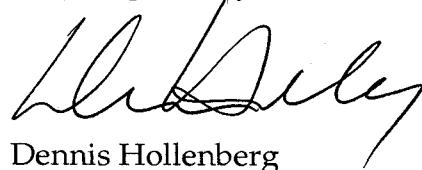
7. **Claims 17-19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Old claim 17 is combined with old independent claim 16 and rewritten (as mentioned above) as independent claim 35. Old claims 18 and 19 have been replaced by claims 36 and 37 (as mentioned above).

### Conclusion

For all the above submitted reasons, applicant submits that the claims are now in proper form, and that they define patentability over the prior art. Therefore, applicant further submits that this application is now in condition for allowance, which action he respectfully solicits.

Very respectfully,



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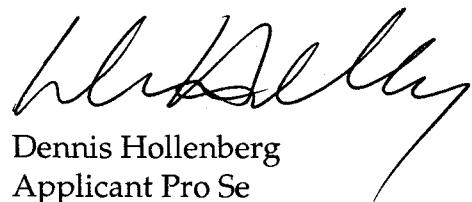


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b. ascertaining subsequently whether said location information of a selected subset of said mobile computers with radios indicates said computers suitably proximate to said offers, or display thereof, presented by said providers, and

c. transmitting one or more said offers including by visual, aural, and other data types and other pertinent information, severally to said subset of said mobile computers with radios according to said customers' selections and contingently dependent on subsequent actions of said customers whereby said customers using said computers with radios can shop more knowledgeably and efficiently.

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48. The method of claim 47 wherein said actions of said customers include severally making responses to appropriate offers and subsequently communicating using said mobile computer with radios each of said responses, including bids, counter offers, and purchasing and credit information, to said situation information system associated with providers whereby mutually beneficial commerce is securely and easily conducted.

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49. The method of claim 48 wherein said customer information includes data further processed by means selected from the group consisting of options and filters whereby said customers severally receive information, including goods and services information, appropriate to the requirements of said customers.

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50. A method of communicatively executing, including making apparent to the aural and tactile senses of the user, one or more transmittable mappable hypertext items representing people, organisms, and objects, including buildings, roads, vehicles, and signs, on a computer in a manner scalably representing interrelationships of said objects, comprising the steps of:

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a. searching each of one or more unique mappable information code sequences, each of which said code sequences serving to uniquely represent one of said items and copied from the memory of said computer or received from an alternate source, for a field containing geographical coordinates, said each of said code sequences includes an item reference field, a name field, a location field including said geographical coordinates, and a data field,

b. converting said coordinates to an appropriately proportionate representation on said computer, and

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c. displaying selectively scalably said items on said computer whereby said user may quickly receive and display timely situation information mapped in the context of spatial information, including appropriate to a geographical or other area, in which said mappable hypertext items are quickly received, mapped, and optionally executably selected by said user to provide additional of said situation information or received, stored, and transmitted by a provider of said situation information.

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51. The method in claim 50 wherein said interrelationships of said objects are distance quantities separating each of said objects and are represented by mappable hypertext items processed and selectively represented on said computer whereby time and distance to or between objects may be determined and delimited in order to cause additional information to be executed on said computer from sources, including memory and said service provider, and increase the efficiency of said user thereby.

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